



Shell Offers New AI-Powered Applications Through Open AI Energy Initiative

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Offerings to provide significant time and cost benefits for the energy and process industries

REDWOOD CITY, Calif. & THE HAGUE, Netherlands--(BUSINESS WIRE)-- C3 AI (NYSE:AI) and Shell (NYSE:RDS) today announced three new Shell products that will be available through the Open AI Initiative (OAI), an open ecosystem of artificial intelligence (AI)-based solutions for the energy and process industries.

The OAI, [launched](#) by C3 AI, Shell, Baker Hughes and Microsoft in February 2021, provides an open framework for energy operators, service & equipment providers, and independent software vendors to offer interoperable solutions, powered by the [BHC3 AI Suite](#) and Microsoft Azure. The three new OAI products – Shell Process Optimiser for LNG, Shell Corrosion Advanced Risk Modelling and Analytics, and Shell Autonomous Integrity Recognition – target use cases that will solve key challenges for businesses in the energy industry. By using Shell's proven domain-specific AI applications built on BHC3's scalable AI application development platform and SaaS applications, businesses can rapidly move past data discovery and cleaning to application deployment and realization of value in critical business areas.

Details on the new offerings are outlined below:

- **Shell Process Optimiser for LNG** – The application marries state-of-the-art LNG process engineering and technology with data analytics to enhance asset production by helping asset engineers close the gap between current and optimal production ("gap to potential") by changing key identified operating conditions as optimization levers. The application integrates sensor information, such as pressure, temperature, and flow rate to calculate the optimum setting using custom-built asset machine learning models. It reveals unknown correlations and sweet spots, and derives the best suitable strategies as optimization know-how. The application, capable of handling operational, economic, and engineering constraints, Shell Process Optimiser for LNG generates actionable insights that can be integrated and brought into the continuous closed loop process control layer for sustained benefits realisation.
- **Shell Corrosion Advanced Risk Modelling and Analytics** – The application makes use of novel data analytics techniques to predict internal corrosion and erosion to better prioritize and target inspection and maintenance activities. By using a variety of collected site data, and with the help of artificial intelligence, the software provides new insights to predict corrosion and erosion and identify degradation before leaks happen. By using this solution, operators can lower inspection costs and HSSE risk, minimise cost of related leaks, and safely push production to the limit. Additionally, Shell Corrosion Advanced Risk Modelling and Analytics reduces the need for manual, tedious field inspections, resulting in significant time and cost savings.
- **Shell Autonomous Integrity Recognition** – The application allows inspectors to quickly and easily make use of automated image capture and evaluation to support execution of external integrity inspections. By processing data in the cloud coming from inspections carried out with handheld devices, drones and robots, the solution enables inspectors to objectively evaluate issues, identify items that have been overlooked, reduce the time needed at the desk generating reports, and improve inputs to maintenance planning. Shell Autonomous Integrity Recognition application allows users to identify and classify external corrosion and insulation issues with Machine Vision to reduce leakages. By using this, users can improve the quality, efficiency, and standardization of visual inspections.

These products expand the portfolio of solutions available to OAI subscribers and help accelerate the adoption of enterprise AI in the energy and process industries.

"Previously, there was no framework for Oil and Gas operators to subscribe to proven AI and advanced analytic solutions offered by other operators," said C3 AI CEO Thomas M. Siebel. "By bringing more solutions built on the BHC3 AI Suite to the OAI, Shell is demonstrating market leadership and establishing the OAI as a one-of-a-kind model of collaboration."

These applications also broaden the focus areas of the OAI offerings from asset and system reliability to facility and plant optimization and asset integrity, adding to an expanding portfolio of highly differentiated, domain-specific and proven AI applications and modules that are interoperable. These applications can be deployed together to realize business value and create scalable, futureproof reference architectures.

"The products announced today have already been deployed at Shell and have been proven to either create operational efficiencies and savings or generate additional revenue and opportunity," said Dan Jeavons, Vice President Computational Science and Digital Innovation at Shell. "As more products are added to the growing OAI eco-system, we look forward to working with C3 AI, Baker Hughes, and the other ecosystem partners to build the next-generation platform for the future energy system."

About C3.ai, Inc.

C3.ai, Inc. (NYSE:AI) is the Enterprise AI application software company that accelerates digital transformation for organizations globally. C3 AI® delivers a family of fully integrated products: [C3 AI® Suite](#), an end-to-end platform for developing, deploying, and operating large-scale AI applications; [C3 AI Applications](#), a portfolio of industry-specific SaaS AI applications; [C3 AI CRM](#), a suite of industry-specific CRM applications designed for AI and machine learning; and [C3 AI Ex Machina](#), a no-code AI solution to apply data science to everyday business problems. The core of the C3 AI offering is

an open, [model-driven AI architecture](#) that dramatically simplifies data science and application development. Learn more at: www.c3.ai.

About Royal Dutch Shell plc

Royal Dutch Shell plc is incorporated in England and Wales, has its headquarters in The Hague and is listed on the London, Amsterdam, and New York stock exchanges. Shell companies have operations in more than 70 countries and territories with businesses including oil and gas exploration and production; production and marketing of liquefied natural gas and gas to liquids; manufacturing, marketing and shipping of oil products and chemicals and renewable energy projects. For further information, visit www.shell.com. The companies in which Royal Dutch Shell plc directly and indirectly owns investments are separate legal entities. In this document "Shell" is sometimes used for convenience where references are made to Royal Dutch Shell plc and its subsidiaries in general.



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